

# Reference values for Muscle and Nerve Ultrasonography in Adults

Published: 18-08-2014

Last updated: 20-04-2024

To obtain normal values for neuromuscular ultrasound parameters in adults.

<b>Ethical review</b>	Approved WMO
<b>Status</b>	Recruitment stopped
<b>Health condition type</b>	Neuromuscular disorders
<b>Study type</b>	Observational invasive

## Summary

### ID

NL-OMON41059

### Source

ToetsingOnline

### Brief title

REMNUA

### Condition

- Neuromuscular disorders

### Synonym

Reference value muscle nerve

### Research involving

Human

### Sponsors and support

**Primary sponsor:** Academisch Medisch Centrum

**Source(s) of monetary or material Support:** Ministerie van OC&W

### Intervention

**Keyword:** Muscle, Nerve, Reference values, Ultrasound

## Outcome measures

### Primary outcome

Neuromuscular ultrasound parameters: muscle and nerve thickness, area, echogenicity and vascularity.

### Secondary outcome

Not applicable

## Study description

### Background summary

Neuromuscular ultrasound parameters are increasingly being used in the analysis of neuromuscular diseases. Normal values depend on equipment, settings and demographic characteristics. Collection of normal values as obtained with our own equipment and settings using standardized measurement protocols at the Department of Neurology, Clinical Neurophysiology, AMC, are needed for proper judgement in clinical practice and for reference values to be used in future study populations in patients with diseased muscles and nerves.

### Study objective

To obtain normal values for neuromuscular ultrasound parameters in adults.

### Study design

Observational, cross-sectional study.

### Study burden and risks

Ultrasound is a non-invasive, painless, and harmless investigation, thus having a negligible risk and burden for the healthy volunteers. After filling out a short check list to exclude a possible neuromuscular disease, the ultrasound investigations will take 60 min. There will be no health benefits for the healthy volunteers. Travel costs will be reimbursed.

## Contacts

### Public

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### Scientific

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## Trial sites

### Listed location countries

Netherlands

## Eligibility criteria

### Age

Adults (18-64 years)

Elderly (65 years and older)

### Inclusion criteria

Healthy volunteers, male and female, 18 \* >80 years of age

### Exclusion criteria

Diseases in medical history that may influence neuromuscular system

Increased alcohol use (>3 per day)

Medication that may influence neuromuscular system

Family history with neuromuscular disorders;Symptoms of muscle weakness

Sensory symptoms

## Study design

### Design

**Study type:** Observational invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Diagnostic

### Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 10-03-2015

Enrollment: 100

Type: Actual

## Ethics review

Approved WMO

Date: 18-08-2014

Application type: First submission

Review commission: METC Amsterdam UMC

## Study registrations

### Followed up by the following (possibly more current) registration

No registrations found.

### Other (possibly less up-to-date) registrations in this register

No registrations found.

**In other registers**

Register	ID
CCMO	NL48391.018.14